

Candolle says in his *Mémoires* that, not wishing to seem negligent to Hedwig, he asked Garnery to write to the author and state his reasons for the delay. This was promised, but not done. De Candolle became impatient, and threatened to give the publication of the succulent plants to some one else if he did not soon comply. Garnery was piqued at this, but de Candolle remained firm, and the publication of the succulent plants came to an end. Shortly afterward Garnery went into bankruptcy.

With what sanction de Candolle used the most important of Hedwig's deductions in his *Flore Française*, which appeared in 1805, we are not told. But the failure to secure the publication of this fine piece of work and stripping it of its scientific treasures did not interrupt the friendship, if we may trust the statement in the *Mémoires*. Shortly afterward, in July, 1806, Hedwig died. The work was subsequently placed in the hands of Guillemin, of Paris, but was never published.

It is a pity that so admirable a piece of scientific work should have met such an untoward fate. Even after a hundred years its publication would be a distinct gain to science.

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### SHORTER NOTES

THE JUNCACEAE OF THE WEST INDIES. — Professor Buchenau contributed to the first volume of Professor Urban's *Symbolae Antillanae* an account of the Juncaceae hitherto known in the West Indies. He there records three species, *J. dichotomus* Ell., from Jamaica, a widely spread species in the eastern United States, *J. repens* Michx. from Cuba, also a species of the eastern United States, and *J. Guadeloupeensis* Buchen. & Urb., a new species from Guadeloupe.

*J. aristulatus* Michx., another common species of the southeastern United States, may now be added to this list; it was collected by me in meadows at Sagua la Grande, Cuba, growing along the edges of small pools, September 4, 1903 (Britton & Wilson, No. 286).

N. L. BRITTON.

AGDESTIS CLEMATIDEA Moç. & Sessé. — We found this beautiful white-flowered vine of Mexico and Central America in September climbing profusely over bushes on the playa of Matanzas, Cuba; it has evidently been cultivated in gardens there, but has made itself perfectly at home in the native tangles of shrubs and vines as a naturalized plant. The flowers and inflorescence are wonderfully Clematis-like, greatly resembling those of *Clematis Vitalba* of Europe and to a considerable degree those of our own *Clematis Virginiana*. But the most striking thing about the plant is its horrid odor, the flowers being, if anything, more fetid than those of the carrion-flower or skunk-cabbage, a fact which does not seem to be recorded in descriptions of the species. According to Professor Bailey, the vine has been cultivated in California.

N. L. BRITTON.

A NEW STATION FOR *ARABIS GEORGIANA*. — On December 30, 1903, while walking along the Oostanaula River in Gordon County, Georgia, near Resaca, I came upon a considerable quantity of an *Arabis*, which by reason of its long erect pods, pubescence, mode of branching, and other characters observable at this season, can be no other than *A. Georgiana*, a species described in TORREYA last June, and known hitherto only from a single station on the banks of the Chattahoochee River in the coastal plain. The new station is in the Palaeozoic region, about 167 miles from the type-locality and almost due north of it. Its altitude is about 640 feet. The rock at this point is what has been called Oostanaula shale, and is of Cambrian age.

The habitats of the *Arabis* at the two stations are very similar, and many of the species accompanying it on the Chattahoochee also occur with or near it on the Oostanaula, among those which were recognizable being *Arundinaria macrosperma* Michx., *Hydrangea arborescens* L., *H. quercifolia* Bartr., *Platanus occidentalis* L., *Geum Canadense* Jacq., *Rhus glabra* L., *Acer saccharinum* L. (*A. dasycarpum* Ehrh.), and *Sassafras Sassafras* (L.) Karst. Some of these have rather a limited distribution in Georgia, and their occurrence together at two such widely separated localities is interesting. A visit to the new station in summer

would doubtless reveal a still larger number of species common to the two localities.

It would not be at all surprising if *Arabis Georgiana* should turn out to be more common in the hill country than in the coastal plain, for the genus *Arabis* (and in fact the whole family of Cruciferae) is mainly a northern one, and at the type-locality the species under consideration is associated with many species which do not range much farther south.

ROLAND M. HARPER.

GEOLOGICAL SURVEY OF GEORGIA.

NOTES ON *EPIGEA REPENS* L. — The lovely arbutus, as it is called in this region, is usually much sought after in the early spring when in flower. Even here, near our larger towns, it may disappear within a few years, if the wholesale collecting goes on.

It is a well-known fact that many of our spring flowers may be found in flower in the autumn, particularly many of our violets. The finding of *Epigea repens* in flower, October 14, 1895, was indeed a surprise; and to others, to whom I have mentioned the fact. I became so much interested in this patch of plants, which grows under a white pine tree, in gravelly soil by a wagon road, that I have made observations yearly when possible or have had others do so. The plants in this patch never flower in the spring! Near by are patches which are spring-flowering. The later dates of finding the arbutus in flower are: November 17, 1896; October 16, 1898; November 11, 1899; November 1 and December 3, 1900, September 24, 1903. The flowers are as well developed as any to be found in April, often tinged with pink and as deliciously fragrant.

Later in October, 1895, while climbing the Putnam Mountain range, south of Lake George, I found other patches of arbutus in flower; but these hardly could have been located again, if I should have desired to make observations. Hundreds of patches in other parts of our area have been searched over in vain; although well-developed flower buds are almost always present in the autumn. Why has this particular patch of plants taken to flowering in the autumn, rather than spring?

VAUGHNS, NEW YORK.

S. H. BURNHAM.

A NEW LEMANEA FROM NEWFOUNDLAND.—*Lemanea* (*Sach-eria*) *borealis*. Sexual shoots evenly tufted, slender, 1–3 cm. or more long by 0.25–0.33 mm. in diameter: sterile base 0.5–1 cm. long, slender, gradually tapering into the fertile portion, the transition very rarely abrupt: antherid zone when young prominently tuberculate with 2–5 antherid papillae, these disappearing in age so that the older shoots are plane: procarp zone usually cylindrical, rarely constricted in the middle, sometimes slightly so near the apex, the result being that in age, with the disappearance of the antherid papillae, the shoots are nearly or quite cylindrical, the younger and middle-aged ones appearing slightly nodose: procarps arising in both the antherid zone and procarp zone, but not quite reaching the middle of the procarp zone: carpospores in tufts throughout the entire length of the shoot, not collected at the antherid zones as in *L. fucina* and its varieties, but not extending so closely to the middle of the procarp zone as in *L. fluvialilis*: carpospores elliptical to oblong, 25–45  $\mu$   $\times$  18–25  $\mu$ : *Chantransia* stage represented only by fragments at season when collected, but threads 18–25  $\mu$  in diameter, cells 35–45  $\mu$  long, often slightly constricted at the septa: plants of a dull green color on drying, the spores sometimes showing a tinge of blue, and darkening, but not blackening the shoots: species of a parasitic *Chantransia* (*C. violacca*) sometimes present on the old shoots.

On rocks in a waterfall, Bay of Islands, Newfoundland, August 9, 1901, no. 1108. C. D. Howe and W. F. Lang.

These specimens agree with those collected by J. B. Fowler in Nepisiguit River, N. B.; and by J. Macoun in Pirates' Cove, Nova Scotia, and listed as small specimens of *Lemanea* (*Sach-eria*) *fucina* Bory, var. *rigida* (Sirodot) on page 226 of my Monograph,\* which forms should now be referred to this species.

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## REVIEWS

### The Grass Family as treated in Urban's Flora of Porto Rico †

The great interest taken of late years in the flora of the West Indies has made the appearance of the initial parts of the Flora

\* Monograph of the Lemnaceae of the United States. Ann. Bot. 4: 177–229. pt. 7–9. 1890.

† Urban, I. Flora Portoricensis, Symb. Antill. 4: 76–109. 1903.